8 SENSITIVE LANDS

The physical environment of the intermountain West creates a number of environmentally sensitive issues for a community to deal with as they develop over time. As Brigham City develops their General Plan they need to look at and consider what are the environmental issues and sensitive lands within the community. There are many resources that can help local entities to determine what issues need to be addressed and how any problems that may exist can be resolved. Some of the environmental concerns around the State are wetlands, endangered species, archeological sites, and geological sites among other issues. Environmental concerns should be addressed when looking at an area for any type of improvement to the transportation system. Specific sensitive lands within Brigham City General Plan include the following wetlands, slope of the land, natural drainage ways, flooding, hillside erosion, potential landslide areas, and seismic hazards. Protecting these sensitive lands is a critical in dealing with the future growth of the City. The map on the following page identifies the Sensitive Lands within Brigham City.

8.1 RELEVANT CORE PRINCIPLES

CORE PRINCIPLES:				
3	AMENITIES: Identify priority locations for additional community amenities, including recreational areas, trails, & activity centers. Encourage aesthetic enhancements through street trees and proper facility maintenance.			
3a.	Identify desired amenities, and explore appropriate locations (i.e. Shoshone Trail Head, Cultural Arts Center).			
7	HERITAGE & AESTHETICS: Protect Brigham City's Environmental and Cultural and Historic heritage for future generations by preserving critical natural and historic lands, and valued cultural and architectural sites.			
7a	Consider appropriate lands for preservation to protect public health and safety, and to preserve wildlife habitat.			
7b	Consider appropriate development adjacent to natural and agricultural areas			
7c	Identify heritage landmarks including historic buildings and landscapes			
7d	Consider protection of hillsides; wetlands, and other lands that define Brigham City's character			

Front of Sensitive Lands Map									

Back of Sensitive Lands Map									

8.2 SENSITIVE LAND GOALS

8.2.1 GOAL: Conserve Sensitive Lands in Cooperation with Landowners

Background

Brigham City and surrounding future annexation areas contain sensitive lands that residents expressed a desire to preserve in visioning workshops held during the winter of 2004. These land areas include the remaining mountain bench along the east edge of Brigham City, privately owned wetlands west of the city, wetlands that are associated with the Bear River Bird refuge, and privately owned mountain areas between Brigham City and Mantua.

Brigham's East Mountain Bench:

Although much of the remaining bench areas are too steep for development, a significant portions of the bench could be accessible to development. Servicing steep slope development would not only require significant private investment to provide water, sewer, and road services, but would require on-going public costs to maintain streets and other infrastructure liabilities. Residents and stake holders unanimously expressed preferences to restrict further development on the bench to preserve visual quality in the community, and maintain pedestrian access to mountain trails. The State Division of Wildlife Resources has identified the Bench area in Brigham City as critical deer winter habitat. This designation was given due to the bench's west and south exposures that result in faster snow melt and exposure of food sources such as grasses and shrubs for wildlife.

Wetlands West of Brigham City:

Brigham City is working with neighboring jurisdictions including Box Elder County and Perry City to complete a Special Areas Management Plan or a SAMP. The purpose of the SAMP is to identify wetlands that are of high ecological value to the region, Definition of Sensitive Lands:

For purposes of the general plan's policy statements sensitive lands are hereby defined as:

- 1) natural hazard areas
 - Steep slopes above 30 percent grade
 - Flood plains
- 2) environmentally sensitive areas
 - Critical wildlife habitat
 - Wetlands
 - Riparian and lakeshore areas
- 3) Open space and agricultural land
 - land identified by citizens as having scenic or recreational value
 - · viable agricultural land

and wetlands that are less ecologically valuable that might be better suited for development. The results of this study should identify wetlands east of the freeway and west of Brigham City that are of significant value to assure proper water drainage and clean ground water.

Wetlands associated with the Bear River Bird Refuge:

The SAMP will also show wetlands of higher and lower ecological value west of the freeway that are nearby or are integrated with the public lands of the Bear River Bird Refuge. Brigham City recognizes the national ecological value of this refuge to many wildlife species migrating across North America, and also recognizes the tourism potential that could be achieved once the Bird Refuge completes the new visitor's center on Forest Street west of the freeway. By encouraging development to be routed away from sensitive wetland areas, the Bird Refuge will remain a healthy habitat area and major attraction to tourists that could support Brigham City's economy.

Privately Owned Mountain Areas between Brigham City and Mantua:

Recent discussions with land owners and developers of this mountain area have taken place with city officials and administrative staff. Development in this area would not be visible to Brigham City residents, nor would it generate significant traffic impacts to the community given that access would occur from highway 89. Recent public visioning results showed that residents supported a cluster development and transferred development into smaller development areas to preserve a significant portion of surrounding open area – as opposed to building on larger lots that consume more land. While some residents were hesitant to encourage development in the area. they were not eager to raise public funds to purchase development rights from the land owner(s) to preserve the ground for development. Visioning results reflect a compromise of mountain village style development and cluster development that preserves a significant portion of open space. U.S. Forest Service wildlife biologists suggest that this area is important transitional deer habitat between summer habitat towards the east of hwy 89, and winter habitat on Brigham's west bench. It

has been recommended that development accommodate deer migration by preserving east / west corridors through the area.

By encouraging cluster subdivisions and adopting transferable development right (TDR) zoning, the city may encourage creative development options that preserve critical land areas by shifting development in more appropriate areas.

8.2.1.1 POLICY: Review and, if necessary, modify Cluster Subdivision ordinances to balance meaningful incentives to property owners with substantial open space preservation.

Background

Brigham City has a long standing tradition of a town and country pattern. The majority of growth has occurred near the city's core developed area on smaller lots while surrounding pastures and farms have remained undeveloped. Larger lots (1 acre to 5 acre lots) have recently been developing on the rural edges of Brigham City. Large lots tend to obscure the distinction between agricultural pastures and developed areas, and are typically too small for practical farming purposes. Conservation subdivisions, or cluster development is an alternative for rural areas surrounding Brigham City to maintain distinction between developed areas and open pasture areas. This development pattern may be appropriate for future annexation areas surrounding Brigham City in adjacent mountain areas and wetland regions.

Implementation

Calculate if additional density increases potential return on investment just sufficient to cover the value of the open land that would be conserved

8.2.1.2 POLICY: Allow non-adjacent clustering

Background

Non-adjacent clustering works just as standard clustering, but it enables a landowner with two or more parcels to consider all as one in clustering lots. More than one landowner could voluntarily participate. In this approach, unlike TDR, there is not a change of zoning and units are not bought and sold, it simply works like clustering but introduces the flexibility to consider more than one piece of land.

Implementation

A. Modify existing Cluster Subdivision ordinances to enable flexible consideration of non-adjacent parcels

8.2.1.3 POLICY: Explore down-zoning to accomplish sensitive land preservation

A reduction in overall allowed zoned densities should be considered only if other strategies have been explored and shown to not be viable and there is a compelling connection between the reduction of development rights and a strong public interest in sensitive lands preservation. If a down zoning is considered, a minimum property right should be ensured for property owners to retain some economic benefit; the land should not be dedicated to public use.

8.2.1.4 POLICY: Explore financing strategies to purchase conservation easements or outright purchase of land.

The purchase of a conservation easement is an effective means of ensuring continued use of farmland; the owner continues to own the land, but has sold his right for additional development to the city or other conservation-minded organization. The outright purchase of land is the most complete means of effecting control and preserving sensitive land; this requires complete

compensation of a voluntary landowner. These two approaches are the most expensive of the policies related to

8.2.1.5 POLICY: Consider a Transfer of Development Rights system.

Background:

TDR is similar to cluster development zoning in that development is allowed on smaller lot sizes and the remaining area is preserved as open space. While cluster development usually applies to one development site, TDR applies to parcels that are separate or non-adjacent to each other. This is accomplished by allowing land owners to sell density,

or development rights to developers seeking greater density where development is more appropriate. Areas identified as preservation areas from which to sell density are called "sending area," while areas where density may be transferred to for development are called "receiving areas." TDR may occur as two land owners pooling together their density resources to achieve additional density in a receiving area, or it may be established as a community-wide program where developers may purchase development rights from willing land owners throughout the community. The city must require that a conservation easement be placed on property from which development has been transferred to assure that future development will not occur on preserved land.

TDR programs should be voluntary for land owners. In other words, both land owners in sending areas and developers in receiving areas should be able to build a base number of units without participating in a TDR process. However, a TDR program should be structured with enough economic incentive that sending zone land owners are motivated to sell density – or TDR's, and developers in receiving areas are motivated to purchase additional density. TDR should be value neutral to developers seeking density in a receiving zone area. Developers will pay more for land that is zoned at higher density than land zoned at a lower density. A TDR program would not up-zone property in a receiving zone area unit a developer purchases

Implementation:

- A. Establish sensitive lands as sending areas

 A sending area is where development rights may
 be voluntarily sold
- B. Identify additional sensitive land sending areas based on public input
- C. Prioritize Sending areas
- D. Establish residential Land Use Categories as receiving areas
- E. Establish commercial Land Use Categories as receiving areas

This could be accomplished if a residential development right could be converted to the right for increased commercial square footage using a conversion rate.

EXAMPLE: A given residential land use category is defined as four to five units per acre. Without TDR, a developer may build 40 units in a 10 acre development (excluding right-of-way area) as defined by the minimum value of four units per acre in this range. The developer may choose to purchase up to ten additional development rights (TDR's) to achieve the maximum value of this range (five units per acre).

TDR's from a sending zone land owner. This would prevent a land owner selling property in a receiving zone area to a developer from being awarded an up-zone to higher density. Otherwise the developer would be paying for the value of increased density twice, once to the receiving zone land owner, and a second time when purchasing TDR's from a sending zone land owner. This method of zoning treats land owners in receiving zone and sending zone areas more equitably in density allocation than traditional zoning that designates high density areas for some land owners, and agricultural low-density zoning for other land owners. The city's decision to adopt a TDR program should be based on land economic studies to assure that property rights are sufficiently compensated for land owners in sending and receiving areas.

8.2.2 GOAL: Encourage Community and Neighborhood Parks Throughout the City

Background

Brigham City's community parks vary in size and function throughout the community. Some are larger in size to accommodate team and spectator sports including ball diamonds and soccer fields, or group activities such as swimming and skating. Some of these larger parks may be associated with public school or church grounds. Other parks are smaller and encourage less community scale activity, catering more to passive recreation such as picnics and children's play ground activities in a neighborhood. Some natural areas such as the Mayor's pond and mountain trails could be considered as natural parks that connect Brigham City to the surrounding region. As the city continues to permit new residential and commercial development, new parks of varying scale and function should be added to assure that new residents and employees of Brigham City enjoy close access to a park. Reasonable proximity to a park should be considered as no less than one half mile, or a 10 minute walk from any residence or business in the community.

8.2.2.1 POLICY: Plan sufficient parks such that Each new residence has at least one park within a distance of one half mile or a 10 minute walk.

Implementation

- A. Update park impact fees for new building permits, or
- B. Allow Developers to waive or reduce park impact fees by including a neighborhood park as part of the new development. This would not require developers to give up residential lots if flexible lot size development is implemented (see section 3.2.1)

8.2.3 GOAL: Encourage Community and Neighborhood Trails Throughout the City

Background

Residents expressed strong desire for trails connecting Brigham City to natural areas such as the east bench and Bird Refuge to the East (See map graphic to right). Trails can link neighborhoods and parks together, as well as link the community to regional trails and routes outside of Brigham City. A variety of access points to trails should be included, including park and walk destinations as well as multiple connections to Brigham's street sidewalk network.

- 8.2.3.1 POLICY: Implement the Trails Master Plan to maximizes public access and use by linking existing and planned neighborhoods and commercial areas to desired walking or biking routes.
- 8.2.3.2 POLICY: Require new developments that contain a planned trail corridor to design around a 20-foot trail Right-Of-Way as depicted on the trails circulation master plan. Developers may use flexible

Trail and Auto Circulation Route Preferences from Visioning Workshops: green routes are trail delineations, red routes are road delineations. Wider lines show weighted preference of routes.



lot size development to achieve density goals while reserving the trail easement area.

Implementation

- A. Consider park impact fees for trails development
- B. Seek grant funding from state and federal enhancement sources

8.2.3.3 POLICY: Develop a Motorized Vehicle Element to the Trails Master Plan to provide for the use of offroad vehicles to access regional trail systems